

BUDEANU, Elena; JEANRENAUD, Angela

Contributions to the pedagogic practice of students of chemistry.
Pt.1. Anal St Jassy I 10 no.1:97-103 '64.

1. Submitted October 26-27, 1963.

BUDEANU, I.

Identification of deforming phenomena in industrial electric plants.

P. 93 (Academia Republicii Populare Romane. Institutul de Energetica. Studii Si
Cenetari de Energetica. Vol. 7, no. 1, 1957, Bucuresti, Rumania)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2,
February 1958

BUDEC, Branka, inz.

Comparative studies on the chemical composition of the light fractions in the crude oil from the Sava River Basin. Nafta Jug 13 no.11/12:349-354 N-D '62.

1. Rafinerija nafte, Sisak.

BUDEC, Branka, inz.

Comparative studies on the chemical composition of the
light fractions of petroleum from the Sava River Basin.
Nafta Jug 13 no. 11/12:349-354 N-D '62.

1. Petroleum Refinery, Sisak.

BUDEC, Branka; PROHASKA, Boris

Yugoslav raw materials for production of aromatic petrochemicals.
Nafta Jug 15 no.11/12:327-335 N-D '64.

1. Petroleum Refinery, Sisak.

✓ 1958. BRIEF DESCRIPTION OF THE COMBINED UNIT AT SISA Budec, R. and
Latis, D. (Glasnik (Petroloun, Zagreb), Feb. 1958, vol. 7, 17-507. A
description and diagram are given of the combination unit of which the
Orthoflow fluid catalytic cracking unit is a part. (L).

gma 222

BUDEC, R.

Schematic design of the combined unit in Steak. p. 47.
NAFTA. Zagreb, Vol. 7, no. 2, Feb. 1956

SOURCE: EEAL, Vol. 5, no. 7, July 1956

BUDEC, Rajko, inz.

Problems of corrosion and erosion in the combined plant of
the Sisak Oil Refinery. Nafta Jug 13 no.11/12:405-414 N-D '62.

1. Rafinerija nafte, Sisak.

BUDEC, Rajko, inz.; SELER, Mirko, inz.; SUTIC, Boris, inz.

Chemical changes in the catalytic reforming of gasoline.
Nafta Jug 14 no.8:209-214 Ag'63.

1. Rafinerija nafte, Sisak.

BUDEC, Rajko, inz.

Problems of corrosion and erosion in the combined plant
at the Sisak Petroleum Refinery. Nafta Jug 13 no. 11/12:
405-414 N-D '62.

1. Petroleum Refinery, Sisak.

CZECHOSLOVAKIA/Radio Physics - Radioastronomy.

Abs Jour : Ref Zhur - Fizika, No 6, 1959, 13827

Author : Budejicky, I., Svestka, Z.

Inst : Astronomic Institute, Ondrejov, Czechoslovakia

Title : 536 Mc Radio Events Associated with Chromospheric Flares During the Year 1956.

Orig Pub : Byul. astron. in-tov Chekhoslovakii, 1958, 9, No 2, 48-60

Abstract : A large amount of statistical material is given on observations performed during 1956 with the aid of a radio telescope and a spectrohelioscope at the Astronomical Institute in Ondrejov. A total of 665 short-duration bursts and flashes of radio radiation were observed, along with 784 flares in H_{α} . All the above radio disturbances are grouped into nine types, in accordance with

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- 109 -

BUDEJICKY, J.

"Waves on the Wire with Dielectric Shell." p. 67,
(MATEMATICKO-FYZIKALNY CASOPIS, Vol. 3, No. 3/4, 1953, Bratislava,
Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4
No. 5, May 1955, Uncl.

BUDEJICKY, J.

"Report on the Beginning of the Activity of the Committee on Mathematics and Physics of the Slovak Academy of Sciences." p. 89,
(MATEMATICKO-FYZIKALNY CASOPIS, Vol. 3, No. 3/4, 1953, Bratislava, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEaL), LC, Vol. 4
No. 5, May 1955, Uncl.

BUDEJICKY, J.

"8th Congress of Polish Mathematicians." p. 90,
(MATEMATICKO-FYZIKALNY CASOPIS, Vol. 3, No. 3/4, 1953, Bratislava,
Czechoslovakia)

SO: Monthly List of East European Accessions, (EMAL), LC, Vol. 4
No. 5, May 1955, Uncl.

BUDEJICKY, J.

Interference radio telescope. p. 55

SDELOVACI TECHNIKA. Praha, Czechoslovakia. Vol. 3, No. 2. Feb. 1955

Monthly List of East European Accessions (EEAI), LC. Vol. 8, No. 8, August 1959

Uncl.

BUDEJICKY, Jaromir

CZECHOSLOVAKIA / Radiophysics

I

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 10061

Author : Budejicky, Jaromir

Inst. : Not given

Title : Physical Fundamentals of Radio Telescopes

Orig Pub : Casop. Ceskosl. ustavu, astron., 1956, 6, No 4, 51-60

Abstract : Detailed discussion of the laws of the theory of the fundamental elements of radio telescopes -- sharply-directional antennas and sensitive receivers for the detection of weak noise signals. The modulation method of reception is explained. Bibliography, 10 titles.

Card : 1/1

BUDEJICKY, J.

A radio telescope with a system of two antennae. p. 62. (CASOPIS
CESKOSLOVENSKYCH USTAVU ASTRONOMICKYCH, Vol. 6, No. 4, 1956, Praha,
Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

BUDEJICKY, J.

International Geophysical Year and the technology of telecommunication.

P. 194, (Sdelovaci Technika) Vol. 5, no. 7, July 1957, Praha, Czechoslovakia

SO: Monthly Index of East European Acquisitions (EEAI) Vol. 6, No. 11 November 1957

CZECHOSLOVAKIA/Radiophysics - Application of Radiophysical Methods I-9

Abstr Jour : Ref Zhur - Fizika, No 4, 1959, No 9039

Author : Budejicky J.

Inst : -

Title : An Interesting Method of an Application of Radio Tracking
of Meteors

Orig Pub : Casop. Ceskosl. ustava astron., 1957, 7, No 5, 73-74

Abstract : A popular article on the use of ionized tracks of meteors
for long distance radio communication.

Card : 1/1

BUDEJICKY, J.

Correct use of the terms indukci and induktivni. p. 390. (SLABOPROUDY
OBZOR, Vol. 13, No. 6, June 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

Budejicky, J.

CZECHOSLOVAKIA/Radio Physics - Radioastronomy

I-8

Abs Jour : Ref Zhur - Fizika, No 10, 1958, No 23631

Author : Budejicky Jeremir

Inst : Not Given

Title : About one Possibility of Using Small-Aparture Antennas for
Estimating the Position of Local Sources of Radio Noise on
the Sun's Disk.

Orig Pub : Byul. astron. in-tov Chekhoslovakii, 1958, 9, No 2, 60-67

Abstract : See Referat Zhur - Fizika, 1958, No 9, 21207

Card : 1/1

BUDEJICKY, J.

"Radiowaves from the sun." P. 311.

SLABOPROUDY OBZOR. (Ministerstvo presneho strojirenstvi, Ministerstvo spoju a Vedecka technicka spolecnost pro elektrotechniku pri CSAV). Praha, Czechoslovakia, Vol. 20, No. 5, May 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8, August 1959.
Uncla.

BUDEJICKY, J.

Radio emission of interplanetary gas. In English. p. 94.

BULLETIN OF THE ASTRONOMICAL INSTITUTES OF CZECHOSLOVAKIA. (Ceskoslovenska akademie
ved. Astronomicky ustav) Praha, Czechoslovakia, Vol. 10, no. 3, May 1959

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 11, Nov. 1959
Uncl.

CZECHOSLOVAKIA/Radio Physics - Radioastronomy.

I

Abs Jour : Ref Zhur Fizika, No 4, 1960, 9565

Author : Budejicky Jaromir

Inst : -

Title : Methods of Observing Radio Radiation from the Sun

Orig Pub : Slaboproudy obzor., 1959, 20, No 7, 435-444

Abstract : Survey article. The principal methods of observing radio waves from the sun are described. Brief data are given on the principal instruments used for these observations. For the beginning of the article see Referat Zhur Fizika 1960, No 1, 1804.

Card 1/1

Z/039/60/021/03/010/028

B073/B135

AUTHOR: Jaromír Budějický (Doctor of Natural Sciences,
~~Candidate of mathematical and physical Sciences~~)

TITLE: Monochromatic Radio Radiation of Interstellar Hydrogen

PERIODICAL: Slaboproudý Obzor, 1960, Vol 21, Nr 3, pp 163-172

ABSTRACT: On the basis of published information, the author reviews the theory of the origin of this radiation and also the main methods of observation and available instruments as well as the main results of observations. He deals with the subject matter under the following chapter headings: emission on the 21-cm hydrogen line; main methods of observation; main results of observations. There are 21 figures, 3 tables and 31 references, of which 24 are English, 2 Czech, 2 Soviet and 3 German. ✓

ASSOCIATION: TESLA-Hloubětín

SUBMITTED: December 3, 1959

Card 1/1

BUDEJICKY, Jaromir, RNDr., C.Sc.

The noise ratio and temperature of radio communication systems.
Sdel tech 9 no.12:451-453 D '61.

CZECH/5996

PHASE I BOOK EXPLOITATION

Budějický, Jaromír, Zdenka Plavcová, and Miroslav Plavec
Radioastronomie (Radio Astronomy) Prague, Nakl. ČAV, 1962. 396 p.
2000 copies printed.

Sponsoring Agency: Československá akademie věd.
Scientific Ed.: Jiří Bouška, Doctor; Scientific Reviewers:
B. Kvasil, Professor, Doctor; and Pavel Mayer, Physicist;
Ed. of Publishing House: Antonín Burda; Tech. Ed.:
František Končický.

PURPOSE: This book is intended for scientific workers,
electronic engineers, designers of radio telescopes and related
equipment, technicians, and students concerned with the explora-
tion of space by radio.

COVERAGE: The book discusses the fundamentals of radio-astronomy
general stellar astronomy. Information is given on radio
of the Sun, Moon, planets, meteors, and auroras.

BUDEJICKY, J., dr., C.Sc.

Transistors in radio relay equipment. Sdel tech 10 no.9:347
S '62.

BUDEJICKY, J., dr.

"Radio and radar technique" by A.T. Starr. Reviewed by J. Budejicky. Slaboprudy obsor 23 no.10:Suppl.: Literatura 23 no.10:L73 '62.

BUDEJICKY, Jaromir, RNDr., C.Sc.

Triodes for centimeter waves. Slaboproudý obzor 24 no.3:157-166 Mr
'63.

1. Tesla Hloubetin, n.p.

BUDEJICKY, Jaromir, RNDr., ScC.

Noise parameters of a triode. Slaboproudý obzor 24 no.8:445-448 Ag '63.

1. Tesla Hloubetin, n.p., Praha.

L 11437-65 EEO-2/ENT(1)/EEC-4/EED-2/EWA(h) Ph-4/Peb/PI-4 ASD(a)-5/ESD(c)/
SSD/AFWL/ESD(t)

ACCESSION NR: AP40487R

Z/0039/64/025/008/0445/0451

AUTHOR: Budejicky, J. (Doctor of natural sciences, Candidate of sciences)

TITLE: Thermionic tube noise parameters

SOURCE: Slaboprudy obzor, v. 25, no. 8, 1964, 445-451 (13)

TOPIC TAGS: thermionics, noise generator, noise analysis, thermionic tube

Abstract [Author's English summary, modified]: On the basis of the theory of a noisy four-terminal network the author derives relations representing noise parameters of thermionic tubes from values immediately available (the so-called over-all equivalent conductivity and detuning when minimum-noise adjustment is made). Also pointed out is a method of measuring noise parameters of a tube by means of a noise diode generator, and compared are noise qualities of a pentode in its original circuit with a triode circuit. Original article has 3 figures and 79 equations.

Card 1/2

L. 11437-65

ACCESSION NR: AP4049740

ASSOCIATION: TESLA, Hloubetin, n. p., Prague /

SUBMITTED: 30Jul63

ENCL: 00

SUB CODE: EC, GP

NO / REF SOV: 000

OTHER: 005

JPRS

Card 2/2

L 21369-66 FSS-2

ACC NR: AP6010925

SOURCE CODE: CZ/0039/65/026/006/0351/0360

AUTHOR: Budejicky, Jaromir (Doctor of natural sciences; Candidate of sciences)

ORG: TESLA Hloubetin n.p., Prague

TITLE: System factor of a frequency-modulated radio relay link

SOURCE: Slaboproudý obzor, v. 26, no. 6, 1965, 351-360

TOPIC TAGS: radio relay, FM communication, radio equipment, multichannel communication, TV broadcasting

ABSTRACT: The article sums up the relations for calculating the system factor of frequency-modulated radio equipment intended for work in a radio relay system. The derivation is made for the case of a multichannel spectrum with frequency channeling as well as for the transmission of television video and audio signals. The results apply to terrestrial links but may be modified for cosmic links. Orig. art. has: 10 figures, 79 formulas, and 1 table. [JPRS]

SUB CODE: 17, 09 / SUBM DATE: 19Jan65 / ORIG REF: 001 / OTH REF: 005

Cord 1/1

UDC: 621.396.65.029.6

BUDEK, J.; CHMURA, R.

2
"Starting and Controlling Freezing Appliances in Shaft Sinking." p.45
(PRZEGLAD GORNICZY Vol. 10, no. 2, Feb. 1954 Katowice, Poland)

SO: Monthly List of East European Accessions, LC, Vol. 3, no. 5, May 1954/Uncl.

L 62792 65 EW(1)/EPF(c)/FSS-2/EEG(k)-2/EPF(n)-2/EEG(m)/T-2/EEU-2 Pz-5/
 Pr-1/Pr-4 HWH/WZ
 ACCESSION NR: AP5018456 UR/0364/65/001/007/0874/0876
 541.136
 AUTHOR: Madeka, Yu. F.; Gurevich, I. G.; Matusevich, L. A.; Pashina, N. M. 46
 45
 TITLE: Electrical conductivity and pH of an equilibrium carbonatebicarbonate electrolyte. B
 SOURCE: Elektrokimiya, v. 1, no. 7, 1965, 874-876
 TOPIC TAGS: electric conductivity, carbonate, fuel cell 29
 ABSTRACT: The article presents the results of measurements of pH and electrical conductivity, two very important characteristics of the equilibrium electrolyte for use in fuel cells with organic fuels. Electrolyte solutions were prepared from K_2CO_3 and $KHCO_3$, dissolved in distilled water. CO_2 was passed through the solution until equilibrium was reached. The equilibrium concentration of carbonate and bicarbonate was determined by titration. The accuracy of analysis was $\pm 3.3\%$ for carbonate and $\pm 1.5\%$ for bicarbonate. A Kohlrausch bridge was used for the measurement of the electrical conductivity. In the experiments a ZG-10 audio frequency generator was used. The working frequency was 1500 cps. An EO-6M oscillograph was used as null indicator. The temperature of the thermostat in which the electrolytic cell
 Card 1/4

L 62794-65

ACCESSION NR: AP5018456

was placed was maintained constant with accuracy of $\pm 0.02^{\circ}\text{C}$. A glass electrode was used for pH measurement. The electrical conductivity and pH were measured in the $70 - 90^{\circ}\text{C}$ range. The results of measurements are shown in Fig. 1 and Fig. 2 of the Enclosure. The pH values of equilibrium electrolyte were within the 8.5 - 9.0 range. The pH of solutions changes very little with increase of temperature. Orig. art. has: 1 table and 2 figures.

ASSOCIATION: Institut teplo- i massoobmena Akademii nauk BSSR (Institute of Heat and Mass Exchange, Academy of Sciences Belorussian SSR)

SUBMITTED: 22Jan65

ENCL: 02

SUB CODE: EM, GC

NO REF SOV: 003

OTHER: 002

Card 2/4

L 62794-65
ACCESSION NR: AP5018456

ENCLOSURE: 01

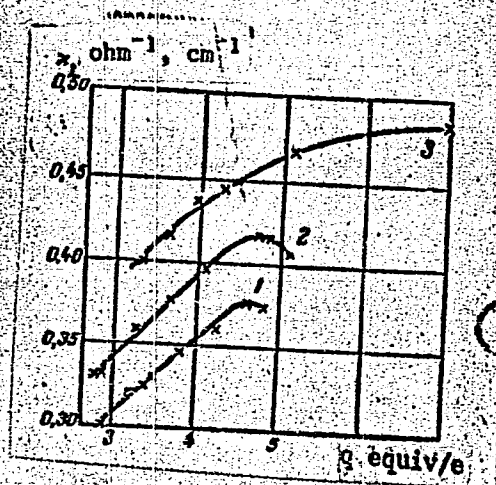


Fig. 1. Specific conductance of the equilibrium electrolyte as a function of the total concentration at different temperatures: 1--70°C, 2--80°C, 3--90°C.

Card 3/4

L 62794-65

ACCESSION NR: AP5018456

ENCLOSURE: 02

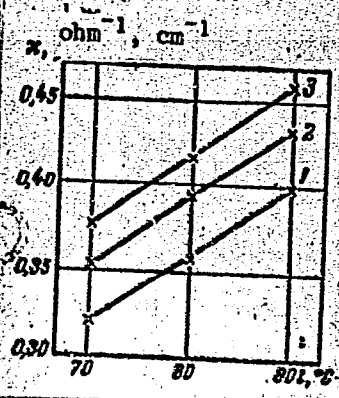


Fig. 2. Specific conductance of the equilibrium electrolyte as a function of temperature at different concentrations: 1--3.3 g equiv/l; 2--4.0 g equiv/l; 3--4.8 g equiv/l.

Card 4/4

BUDEL'KOV, E.A.

Drilling practice in water-bearing sand. Razved. i okh. nedr 26 no.9:
56-57 S '60. (MIRA 15:7)

(Boring)

BUDILOVSKY, Vaclav

Our experiences in the radical treatment of varicoceles by
the Palomo method. Roshl. chir. 35 no.8:491-494 Aug 56.

1. Z urologického oddelení OUMZ v Ostravě, přednosta doc.
dr. K. Uhlíř.

(VARICOCELE, surg.
radical, Palomo method (Cs))

BUDELOVSKY, Vaclav

Nephrolithiasis as a cause of anuria in patients with a solitary kidney. Rozhl. chir. 38 no.10:709-711 0 '59

1. Urologické oddelení MUNZ Ostrava, prednosta doc. dr. Karel Uhlir.
(KIDNEYS, abnorm.) (ANURIA, etiol.)
(URINARY CALCULI, compl.)

BIRYULIN, V.T.; BUDEN, E.A.

Experience in the operation of UNS-150 airtight units in the
discharge of paraffin-base petroleums. Transp. i khran. nefi
pt. c no.2:10-12 '63. (MIRA 17:10)

1. Ventspilsskaya perevalochnaya neftebaza Glavneftatopsnabsbyta
Latviyskoy SSR.

BUDENAYA, V.S.

BUDENAYA, V.S.(Moskva); KUZNETSOVA, A.V. (Moskva); NOVOSELOVA, A.I. (Moskva)

"Arithmetic of natural numbers" and "Arithmetic of fractions and
basic magnitudes" by I.K.Andronov. Reviewed by V.S.Budenaia,
A.V.Kuznetsova, A.I.Novoselova. Mat.v shkole no.6:83-85 N-D '57.
(MIRA 10:11)

(Arithmetics--Textbooks)

BUDENE, Claude

TRUHAUT, Rene; ~~BUDENE~~, Claude

Studies on the fate of cadmium in organism in case of poisoning;
aspects of industrial medicine. Arh. hig. rada 5 no.1:19-48 1954.

1. Toksioloski laboratorij, Farmaceutski fakultet sveucilista,
Paris. Radnja primljena 14.VIII. 1953.

(CADMIUM, pois.

*exper., metab. in rat, nephelometry)

(POISONING, exper.

*cadmium, metab. in rat, nephelometry)

PROSEKOV, E. (Moskva); BUDENKO, A. (Moskva); BYCHKOV, V. (Moskva)

Transistorized voltage stabilizers. Radio no. 9:43-46 S '64.
(MIRA 17:12)

card 1/2

4

Acetone derivatives, CL. Heterocyclic compounds

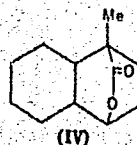
Synthesis of polycyclic compounds containing a condensed ring of 4-piperidone. I. N. Nazarov, L. I. Ukhov, and V. A. Pribludny, *Izv. Akad. Nauk S.S.S.R., Khim. Akad. Nauk*, 1958-59; cf. C.A. 43, 2058h; 47, 1610h; 52, 6410h. Heating 300 g. allyl 2-methyl-1-cyclopenten-1-yl ketone (I), 120 g. 25% aq. MeNH₂, and 270 ml. MeOH in a sealed ampul 7 hrs. at 60-70°, and cooler, the mixt. gave acidifying, removing the neutral matter with H₂O, and adding alkali to the aq. layer, gave 253 g. 1,2,2-trimethyl-1-cyclopentylpiperidine, b. 110-15°, n_D²⁰ 1.5020. To remove any imino by-products the crude product was heated on a steam bath 1 hr. with 1:3 HCl, yielding after the usual treatment the pure material, b. 103-4°, n_D²⁰ 1.5018, d₄ 1.001; *picrate*, m. 195-4° (from dil. EtOH). This base refluxed with MeONa-MeOH 6 hrs. showed no sign of change. Heating 30 g. I with 70 g. 30% NH₄OH and 120 ml. MeOH in an ampul 6 hrs. at 70-8° similarly gave 20 g. 2,4-dimethyl-1-cyclopentylpiperidine, b. 99-100°, n_D²⁰ 1.5021, d₄ 1.014; *picrate*, m. 200-1° (from dil. EtOH); this also failed to isomerize on heating with MeONa-MeOH. Heating 60 g. 2-methoxypropyl 1-cyclopenten-1-yl ketone with 80 g. 25% aq. MeNH₂, and 60 ml. MeOH in an ampul 5 hrs. at 70° gave 30 g. 2,2-dimethyl-1-cyclopentylpiperidine, b. 88-92°, n_D²⁰ 1.4922 (solid), which, heated with 7% HCl 1 hr. at 70-80° to remove imino compounds, yielded the pure substance, b. 86-7°, n_D²⁰ 1.4912, d₄ 1.0101; *picrate*, m. 161.5-5.0° (from EtOH). This base also does not isomerize with MeONa-MeOH. NH₄OH instead of MeNH₂ in the above reaction yields 27.2 g. 2-methyl-1-cyclopentylpiperidine, b. 83-4°, n_D²⁰ 1.4952, d₄ 1.0381; *picrate*, m. 161-2°. This base is also unaffected by MeONa-MeOH. Heating allyl 2,4-dimethyl-1-cyclopenten-1-yl ketone 2.5 g. of an 80% concn. This ketone and its corresponding MeO analog, cf. C.A. 42, 7732c, with 15 g. 25% aq. MeNH₂, and 50 ml. MeOH in an ampul 4 hrs. at 70° gave 17 g. crude 1,2,2-trimethyl-1-cyclopentylpiperidine, b. 101-3°, which, heated 1 hr. with 7% HCl, gave 12.5 g. pure product, b.

90-2°, n_D²⁰ 1.4891, d₄ 1.0390; *picrate*, m. 181-5°; this base is unaffected by MeONa. Aq. NH₄OH in the above reaction similarly gave 15.0 g. 2,6,7a-trimethyl-1-cyclopentylpiperidine, b. 85-0°, n_D²⁰ 1.4812, d₄ 1.0381; *picrate*, m. 161.5-5.6° (from EtOH). Adding 315 g. *cis*-2-oxocyclohexanophthalene and 290 g. HC(CCl₃)CH₃ in dry Et₂O to 180 g. powd. KOH and 1100 ml. dry Et₂O over 3 hrs. at -10°; stirring 6 hrs. with cooling, letting the mixt. stand overnight, and treating it with H₂O gave 250 g. *cis*-2-vinylcyclohexyl 2-naphthyl ketone, b. 131-2°, n_D²⁰ 1.5310 (for the *trans* analog, cf. C.A. 42, 7734d). This started with 50% H₂SO₄ 8 hrs. at 60° gave *cis*-2-vinylcyclohexyl 2-naphthyl ketone, b. 100-2°, n_D²⁰ 1.5183 (for the *trans* analog, cf. N. and B. above). This (165 g.), 3.5 g. concn. H₂SO₄, 50 g. HgSO₄, and 1220 g. 95% MeOH heated 7 hrs. to 60° with stirring (H₂SO₄ is best added in portions) gave 190.7 g. 3-methoxypropyl octahydro-2-naphthyl ketone (II), b. 150-4°, n_D²⁰ 1.5120 (the double bond location is uncertain: 2,3- or 1,2-), which, heated *in vacuo* with p-MeC₆H₄SO₃H, gave allyl octahydro-2-naphthyl ketone, b. 133-5°, n_D²⁰ 1.5220. I (60 g.) heated with 60.8 g. 25% aq. MeNH₂ in 150 ml. MeOH in an ampul 8 hrs. at 70° gave 25.3 g. crude 1,2-dimethyl-1-cyclopentyl-6,7(or 7,8)-benzaminoline, b. 115-93°, which, heated 1 hr. to 80° with 7% HCl, gave the pure base, b. 142-3°, n_D²⁰ 1.5210, d₄ 1.0417; *picrate*, oil; *picric acid*, decomp. 201-3°. Similar treatment of I with aq. NH₄OH gave 2-methyl-1-cyclopentyl-6,7(or 7,8)-benzaminoline, b. 110-2°, n_D²⁰ 1.5106, d₄ 1.0415; *picrate*, could not be isolated. CL. Heterocyclic compounds. 28. Synthesis of some derivatives of 1-benzyl-4-piperazone, I. N. Nazarov and A. I. Lavrenko, *Izv. Akad. Nauk S.S.S.R., Khim. Akad. Nauk*, 1958-59; cf. C.A. 43, 2058h; 47, 1610h; 52, 6410h. Heating 20 g. 6-methyl-1-benzyl-4-piperazone (I) in 20 ml. Et₂O with 13 g. NH₄OH and 17 g. NaOAc in 40 ml. Et₂O for 24 hrs. gave on condn. 15.1 g. 1-benzyl-4-piperazone, m. 131-2° (from Et₂O). Similar treatment of 1,4-bis(benzyl)-4-piperazone gave 10.1 g. 1-benzyl-4-piperazone (m. 131-2°) and 1.1 g. 1,4-bis(benzyl)-4-piperazone (m. 131-2°).

14 g. Na, then with H_2O , extd. with H_2O , the H_2O extd. with 10% H_2SO_4 and NaOH added to the concn. acid layer gave 2.0 g. 1,5-dimethylcyclohex-2-ene-1-carboxylic acid (II), b. 213° (in a N atm.), m. 37-40°, the carbazole, m. 101-11°, forms on exposure to air; HCl salt, m. 254-7°; Ac deriv., m. 180-1° (from CaH_2); Bz deriv., m. 132-3° (from CaH_2). Oxidation of the HCl salt with 80% H_2O_2 gave the corresponding sulfone-HCl, decomp. 285-6°; the use of controlled amt. of H_2O_2 gave the corresponding sulfoxide-HCl, m. 330° (from EtOH); oxidation of the Bz deriv. of the amine gave the corresponding benzoylated sulfone, m. 286-7° (from EtOH). I (6 g.) in 25 ml. 10% NaH in abs. EtOH treated with 0.5 g. Na in 35 ml. abs. EtOH, then with H_2O , extd. with H_2O , the H_2O extd. in turn with dil. HCl, and the ext. evapd. yielded 14% II, HCl, I oxide heated to boiling with 70% H_2SO_4 and poured after cooling into 20% KOH gave the lactam, $S.CH_2.CH_2$.

NH.CO.CH₂.CH₂Me, or $S.CH_2.CH_2$ Me.CO.NH.CH₂.CH₂Me, m. 140-50° (from H_2O); this with 30% H_2O_2 in AcOH gave the corresponding sulfone, m. 221° (from EtOH). Hydrolysis of the lactam at 80° with 10% HCl gave either $H_3NCH_2CH_2SCH_2CH_2CO_2H$ or $H_3NCH_2CH_2SCH_2CH_2CO_2H$, m. 183-4° (from EtOH-Et₂O). With H_2 , NNHCSSNH₂ in aq. AcOH I gave the thiosemicarbazone, m. 162-3° (from EtOH). Similarly 1,1-dioxide gave its thiosemicarbazone, m. 241° (from H_2O); it also forms the semicarbazone, m. 217-18° (from H_2O). CLIII. Diene condensation of 1-vinylcyclohexene with methacrylic acid, methyl methacrylate, acrolein, 2,2-dimethylvinyl ketone and crotonic acid. I. N. Nuzatov and T. D. Nagibina, Zhur. Obshch. Khim. 23, 577-87 (1953); cf. C.A. 48, 5321h. Dehydration of 1-vinylcyclohexanol with $KHSO_4$ gave 1-vinylcyclohexene (I), b. 143-5°, n_D²⁰ 1.4915. Heating 6 g. I, 5 g. CH_3 :CMeCO₂H, and 0.1 g. pyrogallol 8 hrs. at 135-40° gave 5 g. mixed 1-methyl- $\Delta^{4,5}$ -octahydro-1-naphthalene-2-carboxylic acid (II) and $\Delta^{4,5}$ -isomer (III). This mixt. (IIIa), b. 150-2°, n_D²⁰ 1.5109, crystd. from petr. ether, gave 2 g. II, m. 110-12°, which failed to be dehydrogenated on heating with Pt/C; however, heating with Raney Ni in C₆H₆ gave 1.5 g. mixed II and III, b. 144-0°, n_D²⁰ 1.5010.

(picrate, m. 128-9°). Mixed II and III (33 g.) were dehydrogenated as above to 10 g. mixed hydrocarbons, which after further dehydrogenation with Ni at 350-400°, gave 0.05 g. C₁₀H₈ and 14 g. 1-C₁₀H₇Me picrate, in addn. to 11 g. crude material contg. at least 90% 1-C₁₀H₇Me. Heating 64 g. CH_3 :CMeCO₂H with 34 g. I and 0.5 g. pyrogallol 5 hrs. at 138-40° gave 41 g. reaction products, b. 135-53°, yielding on redistn. 25 g. b. 129-40°, which, treated with 10% Na₂CO₃, extd. with Et₂O, and the washed ext. evapd. gave 14 g. lactone (IV), b. 137-8°, n_D²⁰ 1.4930, d₄ 1.035, which does not affect Br water or KMnO₄; the alk. ext. gave 10 g. mixed II and III. Hydrogenation of 4.7 g.



IIIa over Pt in EtOH gave 2.5 g. satd. analog, b. 144-0°, n_D²⁰ 1.5010. A mixed II and III, b. 152-61°, gave the satd. acid, b. 149-54°, n_D²⁰ 1.5035; use of impure II (II-III; m. 99-103°) gave the satd. analog, m. 121-7°. No attempt to sep. the stereoisomers of the satd. acid was made. Heating 5 g. II with 5 ml. 50% H_2SO_4 1 hr. at 100° gave 2.7 g. IV, b. 140-3°, n_D²⁰ 1.4910. This is not hydrolyzed by hot aq. NaOH but heating 4 hrs. with EtOH-EtONa gave the HO acid (V), m. 97-101°; attempts to recrystallize this yielded IV. Heating IV with Raney Ni in C₆H₆ 23 hrs. at 38-60°, followed by addn. similar treatment of the crude products for 21 hrs. gave a fraction, b. 225-32°, which with picric acid yielded about 10% 1-C₁₀H₇Me picrate. Heating 10 g. I with 10 g. CH_3 :CMeCO₂Me in the presence of 0.2 g. pyrogallol in dioxane 8 hrs. at 140° gave 12 g. Me 1-methyl- $\Delta^{4,5}$ -octahydro-1-naphthalene-2-carboxylate (VI), b. 111-12°, n_D²⁰ 1.4910, d₄ 1.0356, which, heated 6 hrs. with 10% MeOH-KOH, gave mixed II and III, partly crystg. This mixt. kept 15 min. in petr. ether-HCl gave a good yield of IV. Hydrogenation of 4.7 g.

ACC NR: AP6007709

SOURCE CODE: UR/0413/66/000/003/0092/0092

AUTHORS: Bordyugov, G. T.; Budenkov, B. A.; Gordiyenko, K. P.

ORG: none

TITLE: ^{AW} Ultrasonic method for measuring thickness. ¹⁴ Glass 42, No. 178580 [announced by All-Union Scientific Research Institute for Development of Nondestructive Methods and Means for Quality Control of Materials (Vsesoyuznyy nauchno-issledovatel'skiy institut po razrabotke nerazrushayushchikh metodov i sredstv kontrolya kachestva materialov)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1966, 92

TOPIC TAGS: thickness ^{measurement}, ultrasonic equipment, acoustic resonance

ABSTRACT: This Author Certificate presents an ultrasonic method for measuring thickness with pulsed ultrasonic instruments. The phenomenon of acoustic resonance of the product at a particular frequency proportional to its thickness is utilized. To provide for continuous automatic measurement with even measurement of the product thickness, the ultrasonic pulses reflected from the product are fed to the master oscillator through a slave system. The slave system provides the tuning of the master oscillator to the resonance frequency of the product by minimizing the amplitude of the reflected pulses.

SUB CODE: 14,10/

SUBM DATE: 18May64

UDC: 531.717.521 534-8

L 06590-67 EWT(d)/EWT(m)/EWP(w)/EWP(j)/EWP(t)/ETI/EWP(k) IJP(c) JD/EM/RM/JH
 ACC NR: AP6029852 (N) SOURCE CODE: UR/0032/66/032/008/0962/0965

AUTHOR: Budenkov, G. A.; Nikiforenko, Zh. G.; Shkol'nik, I. E.

ORG: All-Union Scientific Research Institute for the Development of Nondestructive
 Methods and Means of Controlling the Quality of Materials (Vsesoyuznyy nauchno-issle-
 dovatel'skiy institut po razrabotke nerazrushayushchikh metodov i sredstv kontrolya
 kachestva materialov)

TITLE: An estimate of the stress state of a material with the aid of ultrasound

SOURCE: Zavodskaya laboratoriya, v. 32, no. 8, 1966, 962-965

TOPIC TAGS: stress analysis, ultrasonic wave, ultrasonic wave propagation, anisotropic
 medium, elasticity theory, elastic stress

ABSTRACT: A method was developed for determining the mechanical stress in solid bodies
 according to their anisotropic parameters. Third-order nonlinear elastic equations
 were given relating stress to deformation and to the speed of three-dimensional shear
 waves. The latter equations showed that in the presence of stress, solid bodies are
 governed by anisotropic elasticity. The experimental and theoretical dependence be-
 tween elastic stresses and the shear parameters of elastic oscillations in various ma-
 terials was developed from the frequency ultrasonic polarization method of measuring
 internal stresses in solids. Elastic anisotropy was determined by measuring the fre-

UDC: 620.179.16

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L 06590-67

ACC NR: AP6029852

quency. The emitter and receiver were positioned so that the direction of the oscillation feed would remain at an angle of $\pi/4$ with the principle plane. In this case, the amplitude of electrical oscillations impinging on the receiver varied according to a cosine law. The change in frequency for a constant path length of elastic oscillations in anisotropic media is given as a function of the relative change in velocity of the shear wave ($\Delta v/v_s$). A block diagram of the experimental apparatus is given. Testing was done on samples of organic glass, a D16T aluminum alloy, and fine-grained concrete. Prismatic samples were compressed; the amplitude-frequency characteristics and the relative change in shear wave velocity are given as a function of the axial stress. From these, the third order constants A and B were determined, where $A = -(\Delta v/v_s \cdot 8\mu^2/\sigma + 4\mu)$. The dependence of $\Delta v/v_s$ on stress is linear and is represented by the equation

$$\Delta v/v_s = \sigma/8\mu^2 (4\mu + A).$$

The relative error in the method was 2-3%. The cause of anisotropy was preferred orientation due to rolling. Orig. art. has: 4 figures, 9 formulas.

SUB CODE: .11,20/ SUBM DATE: none/

ORIG REF: 002/ OTH REF: 005

Ultrasonic Applications

LS

ACC NR: AP6021473

SOURCE CODE: UR/0413/66/000/011/0094/0094

INVENTOR: Zhuravel', V. I.; Minakov, V. I.; Bobrov, V. T.; Dimitraki, P. N.; Niki-forenko, Zh. G.; Budenkov, G. A.; Gitis, M. U.

ORG: None

TITLE: An ultrasonic pulse-shadow immersion flaw detector. Class 42, No. 182390 [announced by the All-Union Scientific Research Institute of Nondestructive Methods for Material Quality Control (Vsesoyuznyy nauchno-issledovatel'skiy institut neraz-rushayushchikh metodov kontrolya kachestva materialov)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 94.

TOPIC TAGS: flaw detection, ultrasonic flaw detector, quality control

ABSTRACT: This Author's Certificate introduces: 1. An ultrasonic pulse-shadow immersion flaw detector which contains an ultrasonic probe unit, line scanning mechanism, oscillator and ultrasonic amplifier. The unit is designed for increased productivity in checking parts of complex shape. The installation incorporates an electronic unit which generates a control signal after the ultrasonic probe unit passes beyond the outline of the part being checked. This signal controls the line scanning mechanism and temporarily disconnects the receiving head from the amplifier. 2. A modification of this flaw detector in which the electronic unit is made in such a

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UDC: 610.179.16.C8

ACC NR: AP6021473

way that when there is a single pair of ultrasonic probes in the installation the receiver head is disconnected from the amplifier during the period when the probe unit is returning to the article being checked. 3. A modification of this flaw detector in which the electronic unit is made in such a way that when there are two pairs of ultrasonic probes located one behind the other along their line of motion in the installation, the receiver head disconnected from the amplifier is the one which first passes beyond the outline of the part being checked. This receiver head is connected when the second pair of probes passes beyond the outline of the part on the return travel of the probe unit.

SUB CODE: 09, 13/ SUBM DATE: 07Dec64

Cord 2/2

BUDEKOV, N., inzh.

Tables for calculating distances of measured points from the main
line in intersecting by theodolite. Rech.transp. 19 no.5:45-46
My '60. (MIRA 13:7)

1. Upravleniye Volgo-Donskogo kanala imeni V.I.Lenina.
(Hydrographic surveying)

BUDENKOV, N., insh.

New method of intersecting measurement points. Rech.transp. 20
no.6:37-39 Je '61. (MIRA 14:6)

(Hydrographic surveying)

BUDENKOV, N., inzh.

A marine surveyor's handbook. Rech. transp. 21 no.1:54 Ja '62.
(MIRA 16:8)

(Hydrographic surveying—Handbooks, manuals, etc.)

BUDENKOV, N., kand.tekhn.nauk

Accuracy of determining the horizontal location of sounding
points. Rech.transp. 23 no.9:46-47 S '64.

(MIRA 19:1)

BUDENKOV, N.A., inzh., IL'IN, A.G., inzh. (g-Stalingrad)

Settling of structures on macroporous soils. Gidr. i mel. 12
no.8:31-37 Ag '60. (MIRA 13:8)

(Hydraulic structures) (Soil mechanics)

BUDENKOV, N.A., aspirant

Setting up observations of deformations of hydraulic structures.
(MIRA 15:7)
Trudy MIIGAIK no.46:95-97 '61.

1. Kafedra geodezii Moskovskogo instituta inzhenerov geodezii,
aerofotos"yemki i kartografii.
(Hydraulic structures) (Surveying)

IL'IN, A.G., inzh.; BUDENKOV, N.A., inzh.

Comprehensive observations on the deformations of a navigable
lock. Izv. vys. ucheb. zav.; geod. i aerof. no. 5:47-53 '61.
(MIRA 15:3)

(Volga-Don Canal—Locks (Hydraulic engineering))
(Surveying)

BUDENKOV, N.A., dotsent

Analyzing the accuracy of river-bed surveys. Izv.vys.ucheb.zav.; geod.
i aerof. no.1:75-84 '64. (MIRA 17:12)

1. Volgogradskiy institut inzhenerov gorodskogo khozyaystva.

PUSHKAREV, V.V.; BUDENKOV, Ye.A.

Extraction of manganese dioxide from its hydrosol by means of
gelatine foam. Koll.shur. 25 no.5:589-592 ~~3-0~~ '63. (MIRA 16:10)

1. Ural'skiy politekhnicheskii institut im. S.M.Kirova.

L 32177-66 EWT(m)/T/ETI/EWP(t) IJP(z) RDW/CD
 ACC NR: AP6011315 (A) SOURCE CODE: UR/0363/66/002/003/0440/0442
 36
 35
 B

AUTHOR: Budennaya, L. D.; Bondar', L. A.; Mizetskaya, I. B.

ORG: Institute of Semiconductors of the Academy of Sciences, UkrSSR (Institut poluprovodnikov kademii nauk UkrSSR)

TITLE: Cadmium-selenium system

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 3, 1966, 440-442

TOPIC TAGS: cadmium selenide, cadmium, selenium, phase diagram, solid mechanical property, *HARDNESS*

ABSTRACT: The microstructure of the cadmium-selenium system was examined by microscopic and x-ray techniques and the microhardness of annealed samples of cadmium-selenium alloys was investigated. The object of the work was to fill the gap in the literature concerning properties of $\Lambda^{III}V^{VI}$ -type semiconductor systems. The Cd-Se alloy samples were prepared by fusing cadmium (10⁻³% impurities) and selenium (99.7% purity) in various ratios in evacuated quartz ampoules. Each sample, 15 g of total weight, was doubly molten and annealed for 400 hours in vacuo at 200°C. The

UDC: 546.3-19-48-23:541.123.2

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ACC NR: AP6011315

phase diagram of the Cd-Se system is shown in figure 1. A two-phase microstructure was found for all Cd-Se ratios examined. The phase diagram of the Cd-Se system was confirmed by microscopic, x-ray, and microhardness techniques. Orig. art. has: 3 figures and 2 tables.

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L 32177-66
ACC NR: AP6011315

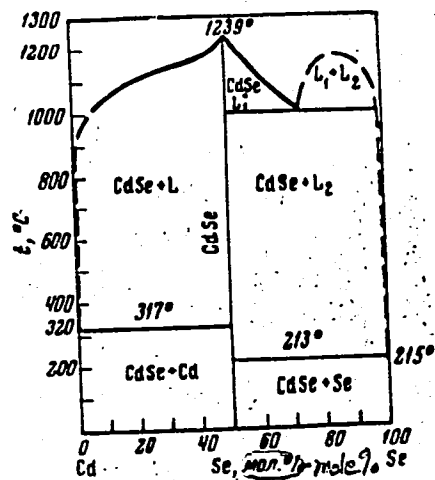


Fig. 1

SUB CODE: 07/ SUBM DATE: 07Apr65/ ORIG REF: 002/ OTH REF: 002

Card 3/3 mc

BUDERNAYA, L.D.

Category : USSR/Solid State Physics - Systems

E-4

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6599

Author : Grigor'ev, A.T. Sokolovskaya, Ye.M., Budernaya, L.D.,
Iyutina, I.A., Maksimova, M.V.

Title : Investigation of the Palladium-Gold-Cobalt System

Orig Pub : Zh. neorgan. khimii, 1956, 1, No 5, 1052-1063

Abstract : Thermal-analysis methods and studies of the hardness and the microstructure after annealing and hardening from different temperatures, of the specific electric resistivity, and of its temperature coefficients were all used for the first time to study the Pd-Au-Co triple system. The two-phase region in the gold-cobalt system spreads extensively into the triple region, which reaches up to 47% Pd at the center of the diagram at room temperature, and is gradually reduced with increasing temperature, reaching 35% Pd at 1000°. The double-eutectic line starts out from the eutectic point of the Au-Co system and extends into the triple system until it reaches a section with 20% Pd, The remaining portion of

Cerd : 1/2

VASIL'KEVICH, I., inzh.; BUDENNYI, A., inzh.

Design of a transistor self-oscillator. Radio no. 7:40-42 '64.
(MIRA 18:1)

BUDENNYI, A., inzh.; BAT', S., inzh.; VISHNYAKOV, A.

Portable transistorized superheterodyne. Radio no.5:43-44 My '65.
(MIRA 18:5)

HUDENNY, A., inzh.

Stabilization of the operation of transistor amplifiers.

Radio no.1:32-34 Ja '66.

(MIRA 19:1)

NETUSHIL, A.V.; KUSHELEV, Yu.N.; USKOV, V.G.; BUDENNYI, A.P.;
SVIRIDOV, A.P.

Automatic devices for checking current progress of students.
Izv. vys. ucheb. zav.; radiotekh. 6 no.4:408-416 Jl-Ag '63.
(MIRA 16:11)

BUDENNYI, A.P.

Transistorized d.c. amplifiers. Trudy MEI no.49:111-124
'63. (MIRA 17:3)

BUDENNYI, A.P.; KULAKOV, L.N.

Control program assigning system. Trudy MEI no.49:29-37
'63. (MIRA 17:3)

BAT', S.; BUDENNYI, A.P.

Transistor radio receiver circuits. Trudy MEI no.49:125-129
'63. (MIRA 17:3)

ACCESSION NR: AT4033628

S/0000/63/000/000/0119/0138

AUTHOR: Netushli, A. V.; Kushelev, Yu. N.; Uskov, V. G.; Budenny*y, A. P.;
Svirido, A. P.

TITLE: Automatic device for checking the current achievement of students

SOURCE: Programmirovannoye obucheniye i kiberneticheskiye obuchayushchiye mashiny*
(Programmed instruction and cybernetic teaching machines); nauchno-tekhn. sb. statey.
Moscow, Izd-vo "Sovetskoye radio " 1963, 119-138

TOPIC TAGS: teaching machine, programmed instruction, relay teaching machine,
electronic teaching machine, language teaching

ABSTRACT: The article describes the experience acquired in the development of teaching machines of the relay and electronic type in the Moskovskiy energeticheskiy institut (Moscow Power Institute). The authors distinguish between two functions in the teaching process: 1) the planning of the teaching schedule; and 2) the carrying out of what has already been planned. It is pointed out that the accomplishment of the second of these functions may be successfully entrusted to specialized teaching machines. The following

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ACCESSION NR: AT4033628

principal units or elements of a typical teaching machine are described and analyzed: 1) the information presentation unit (microfilm projector, tape-recorder, etc.); 2) the response introduction unit (device for collecting the answers of the student; for example, a typewriter-like arrangement on which the replies can be physically printed out); 3) the comparison unit (where the answer of the student is analyzed and compared with the answer programmed in the machine); 4) the timing unit (to measure and regulate the time intervals between the presentation of the question and a correct answer, as well as between two successive questions); 5) the memory unit (where information on possible answers by the student is stored); 6) the evaluation unit (by means of which the student is advised of the correctness or incorrectness of his answers); 7) the information selection unit (necessary when operating with a ramified program, in order to select the next step of the program as a function of the student's answer to the preceding question); 8) the program itself (the fundamental and essential part of any teaching machine). The automatic device called the "Ekzamenator", developed at the Institute, is described. By means of this machine, the student is given a series of questions on current material. Each of the questions is accompanied by several mutually-exclusive responses. The student must

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provide the correct answer to each question. The evaluation is made according to the relative number of correct answers by the student, with consideration of the time taken in replying. All the units of the machine are designed in two versions: the first uses telephone relays as logical elements; the second — semiconductors. Both types are described on the basis of block diagrams accompanying the text. Also described in the article is the "Repetitor" teaching machine, designed for foreign language instruction in the higher institutes of learning (the so-called "vuz") and in the lower-echelon schools. The answer is introduced into the machine by means of a keyboard arrangement. The authors discuss the difficulties created by this form of machine address in terms of the special features and peculiarities of foreign language teaching. Of the two types of programs (linear and ramified) which are commonly used for teaching machines, the "Repetitor" employs the ramified or "expanded" type. Sequential "blocks" of information are fed to the student, depending on the degree of accuracy with which he answers the questions contained in the preceding "blocks". Two operating conditions are possible: one in which the student sets for himself the rate or "tempo" of teaching; the other, in

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ACCESSION NR: AT4033628

which this rate is established by the machine itself. Work is evaluated on the basis of a four-point scale ("excellent", "good", "satisfactory" and "poor") as a function of: 1) the number of errors made by the student in completing the exercises on a given subject theme; 2) the reaction time of the student; 3) the number of requests to the machine for "help" (this accomplished by depressing a special button marked "assistance" on the control panel of the machine, resulting in the supplying of either a leading question or of additional information). A block diagram of the "Repetitor" teaching machine is presented and the operation of the basic units of the device are analyzed, along with a discussion of the algorithm used. Noting that this machine is a partially self-adapting teaching device, the authors express the opinion that it would be expedient to construct a test model on the basis of the design described in the article, placing it into actual practice under academic conditions and then modifying and improving it. Orig. art. has: 13 figures.

ASSOCIATION: Moskovskiy Energeticheskiy institut (Moscow Power Institute)

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ACCESSION NR: AT4033628

SUMMITTED: 03Dec63

SUB CODE: DP

DATE ACQ: 16Apr64

NO REF SOV: 000

ENCL: 00

OTHER: 000

Card 5/5

L 14974-66 EWT(1)/EWA(h) GW

ACC NR: AP6003332

SOURCE CODE: UR/0387/66/000/001/0003/0012

AUTHOR: Dolgoplov, D. V.; Budennyi, A. P.

ORG: Institute of Physics of the Earth im. O. Yu. Shmidt, Academy of Sciences SSSR
(Institut fiziki Zemli Akademii nauk SSSR)

TITLE: Solving the inverse problem of seismometry

SOURCE: AN SSSR. Izvestiya. Fizika Zemli, no. 1, 1966, 3-12

TOPIC TAGS: seismography, mathematic analysis

ABSTRACT: The authors solve the inverse problem of seismometry for galvanometric recording, i.e. to determine each of the three components which make up the vector for true motion of the ground from the respective recordings on three seismograms. This problem reduces to finding the unknown function for forced motion of the ground from the known function graphically represented by the seismogram. The operator method is used for solving the problem (Mikusinskiy, Ya., "Operator Calculus," IL., Moscow, 1956). This method gives a comparatively simple means for dealing with difficulties caused by unknown initial conditions in the oscillations of the ground and

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UDC: 550.340.1

L 14974-66

ACC NR: AP6003332

by the large errors which arise during integration of the differential equation of forced motion for the recording system. Formulas are derived which give an approximate solution for the problem and are applicable for programming on a computer. Orig. art. has: 3 figures, 48 formulas.

SUB CODE: 08/ SUBM DATE: 04May64/ ORIG REF: 004/ OTH REF: 001

Card 2/2 *vmb*

KHITENKOV, G.G.; BUDENIYY, S.M.; BYRDINA, A.S., red.; SMIRNOVA, Ye.A.,
tekh.n.red.

[The book of horses; use and care of the horse] Kniga o lozhadi;
ispol'zovanie lozhadi i ukhod za neiu. Moskva, Gos.izd-vo sel'khoz.
lit-ry. Vol.IV. 1959. 317 p. (MIRA 12:10)
(Horses)

BUDENNYI, S.M.; KHITENKOV, G.G.; ROMANOVICH, Ye.P., red.; FEDOTOVA,
A.F., tekhn.red.

[Book of the horse; breeding in horse raising and on the stud
farm] Kniga o loshadi; plemennaya rabota v konevodstve i konno-
zavodstve. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 443 p.
(MIRA 13:4)

(Horse breeding)

BUDENNYI, Semen Mikhailovich, Marshal Sovetskogo Soyuza; ANISIMOV, A.V.,
red.; KORYAGINA, Ye.V., tekhn.red.

[Indissoluble union] Nerushimyi soiz. Moskva, Izd-vo VTsSPS
Profizdat, 1959. 134 p. (MIRA 13:4)
(Budennyi, Semen Mikhailovich, 1883-)

BUDENNYI, S.M.; ORLOV, F.M.; AZAROVA, O.A., ed.; SMIRNOVA, Ye.A., tekhn.
red.; BALLOD, A.I., tekhn.red.

[Book about the horse; the anatomy and physiological characteristics
of the horse] Kniga o lozhadi; anatomia i fiziologicheskie oso-
bennosti lozhadi. Moskva, Gos.izd-vo sel'khoz.lit-ry. Vol.5.
1960. 350 p. (MIRA 13:6)

(Horses)

BULENNYY, S.M., marshal Sovetskogo Soyuza

Great victory of the Soviet people. Voenn. 37 no.5:1-2 My
'61. (MIRA 14:4)
(World War, 1939-1945)

BUDENNNYY, S.M., marshal Sovetskogo Soyuza

Generation of heroes. Voen. znan. 41 no.2:2-3 F '65.

(MIRA 18:3)

BUDENNY, V. D.

PHASE I BOOK EXPLOITATION

BOV/5556

81-

Moscow. Institut stali.

Novoye v teorii i praktike proizvodstva martenovskoy stali (New [Developments] in the Theory and Practice of Open-Hearth Steelmaking) Moscow, Metallurgizdat, 1961. 439 p. (Series: Trudy Mezvuzovskogo nauchnogo soveshchaniya) 2,150 copies printed.

Sponsoring Agency: Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya RSFSR. Moskovskiy institut stali imeni I. V. Stalina.

Eds.: M. A. Glinkov, Professor, Doctor of Technical Sciences, V. V. Kondakov, Professor, Doctor of Technical Sciences, V. A. Kudrin, Docent, Candidate of Technical Sciences, G. N. Oyka, Professor, Doctor of Technical Sciences; and V. I. Yavoyaskiy, Professor, Doctor of Technical Sciences; Ed.: Ye. A. Borko; Ed. of Publishing House: N. D. Gromov; Tech. Ed.: A. I. Karashev.

PURPOSE: This collection of articles is intended for members of scientific institutions, faculty members of schools of higher education, engineers concerned with metallurgical processes and physical chemistry, and students specializing in these fields.

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New [Developments] in the Theory (Cont.)

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COVERAGE: The collection contains papers reviewing the development of open-hearth steelmaking theory and practice. The papers, written by staff members of schools of higher education, scientific research institutes, and main laboratories of metallurgical plants, were presented and discussed at the Scientific Conference of Schools of Higher Education. The following topics are considered: the kinetics and mechanism of carbon oxidation; the process of slag formation in open-hearth furnaces using in the charge either ore-lime briquets or composite flux (the product of calcining the mixture of lime with bauxite); the behavior of hydrogen in the open-hearth bath; metal desulfurization processes; the control of the open-hearth thermal melting regime and its automation; heat-engineering problems in large-capacity furnaces; aerodynamic properties of fuel gases and their flow in the furnace combustion chamber; and the improvement of high-alloy steel quality through the utilization of vacuum and natural gases. The following persons took part in the discussion of the papers at the Conference: S.I. Filippov, V.A. Kudrin, M.A. Glinkov, B.P. Nam, V.I. Yavoyakiy, G.M. Oyks and Ye. V. Chelishchev (Moscow Steel Institute); Ye. A. Kazachkov and A. S. Kharitonov (Zhdanov Metallurgical Institute); N.S. Mikhaylets (Institute of Chemical Metallurgy of the Siberian Branch of the Academy of Sciences USSR); A.I. Stroganov and D. Ye. Povolotskiy (Chelyabinsk Polytechnic Institute); P.V. Umrikhin (Ural Polytechnic Institute); I.I. Fomin (the Moscow "Serp i molot" Metallurgical Plant); V.A. Faklev (Central Asian Polytechnic Institute).

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New [Developments] in the Theory (Cont.)

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and M.I. Beylinov (Night School of the Dneprodzerzhinsk Metallurgical Institute).
References follow some of the articles. There are 268 references, mostly Soviet.

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Yavovskiy, V. I. [Moskovskiy institut stali - Moscow Steel Institute].
Principal Trends in the Development of Scientific Research in Steel
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Filippov, S. I. [Professor, Doctor of Technical Sciences, Moscow Steel
Institute]. Regularity Patterns of the Kinetics of Carbon Oxidation
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[V. I. Antonenko participated in the experiments.]

Levin, S. L. [Professor, Doctor of Technical Sciences, Dnepropetrovskiy
metallurgicheskiy institut - Dnepropetrovsk Metallurgical Institute].

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New [Developments] in the Theory (Cont.)

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Kapustin, Ye. A. [Docent, Candidate of Technical Sciences, Zhdanov Metallurgical Institute]. Aerodynamic Properties of Fuel Gases and Their Flow in the Combustion Chamber of an Open-Hearth Furnace

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Kudrin, V.A. [Docent, Candidate of Technical Sciences], G.N. Oyko, O.D. Petrenko, A.A. Yudson, Yu. M. Nechkin, B.P. Nam, [Engineers], I.I. Ansheles [Docent, Candidate of Technical Sciences], R.M. Ivanov [Candidate of Technical Sciences], and V.P. Adrianova [Engineer]. Special Features of Making High-Quality Steel in Natural-Gas-Fired Open-Hearth Furnaces

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Butakov, D.K. [Docent], L.M. Mel'nikov [Engineer], A.M. Lirman, V.D. Budenny, P.P. Babich, and A.I. Sinkovich [Ural Polytechnic Institute, Zavod im. Ordzhonikidze Chelyabinskogo sovmarkhoza - Plant imeni Ordzhonikidze of the Chelyabinsk Sovmarkhoz]. Special Features of Making Steel in Open-Hearth Furnaces With Magnesite-Chromite [Brick] Roofs

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Kudrin, V.A., Yu. M. Nechkin, Ye. I. Tyurin [Candidate of Technical Sciences], and Ye. V. Abrosimov [Moscow Steel Institute]. The Acid Open-Hearth Process

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Card 10/14

MEL'NIKOV, L.M., inzh.; BABICH, P.P., inzh.; BUDENNYI, V.D., inzh.;
LIRMAN, A.M., inzh.

Dependence of steel smelting processes on heat transmission in
open-hearth furnaces. Trudy Ural. politekh. inst. no. 91:47-55 '60.

(Open-hearth process) (Heat—Transmission) (MIRA 14:2)

BUDENNYI, V.N., inzh.

~~Some~~ problems concerning the structure of thermal electric
power plants. Energetik 10 no.9:4-5 9-'62. (MIRA 17:1)

STAROVEROV, Yu.; GIMADETDINOV, R.; BUDENOV, I.; SEREBRYANNIKOV, G.,
ekonomist

Workers' gifts to the 22d Congress of the CPSU. Avt.transp. 39
no.9:54-55 S '61. (MIRA 14:10)

1. Chleny Astrakhanskogo gorodskogo komiteta Vsesoyuznogo Leninskogo
kommunisticheskogo soyuza molodezhi (for Staroverov, Gimadetdinov).
2. Ministerstvo avtomobil'nogo transporta i shosseynykh dorog
Litovskoy SSR (for Budenov). 3. 2-ya Pavlodarskaya avtobaza (for
Serebryannikov).

(Efficiency, Industrial)

BUDENOVAS, I.

Learning on the activists. Sov.prefsoiuzy 4 no.4:55-56 Ap '56.

(MIRA 9:7)

1. Instruktor Litovskogo respublikanskogo komiteta profsoyusa
rabochikh kommunal'nogo khozyaystva.
(Trade unions)

BUDENOVAS, I.

Go more deeply into the matter of trade-union work. Sov. profsoiuzy
5 no.2:64-66 P '57. (MLEA 10:4)

1. Instruktor Litovskogo rayonnogo komiteta profsoyuzarabochikh
kommunal'nogo khozyaystva.
(Trade unions)

S/073/62/028/005/001/005
1003/1203

AUTHORS: Delimarskiy, Yu.K. and Buderaskaya, G.G.

TITLE: The solubility of titanium, zirconium, and hafnium dioxides in fused fluorides of alkali metals

PERIODICAL: Ukrainskiy khimicheskiy zhurnal, v.28, no.5, 1962, 565-570

TEXT: The solubility of titanium, zirconium, and hafnium in fused lithium, sodium, and potassium fluorides in the temperature range 1000°-1200°C decreases in the following order, $TiO_2 > ZrO_2 > HfO_2$, while the solubility of any one of these oxides in the above fluorides is the lowest in LiF, higher in NaF, and the highest in KF. An equation is given representing the relationship in perfect solutions between the solubility of solids in fused salts and the temperature. The solubility of the dioxides investigated in fluorides of the alkali metals shows some deviation from the solubility for perfect solutions. There are 3 figures and 3 tables.

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The solubility...

S/073/62/028/005/001/005
1003/1203

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN USSR (Institute
of General and Inorganic Chemistry, AS UkrSSR)

SUBMITTED: March 29, 1961

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L 49217-65 EWG(j)/EWG(r)/EWT(1)/FS(v)-3/EWG(v)/EWG(a)-2/EWG(c) Pe-5 DD
ACCESSION NR: AF4044091 R/0012/64/000/004/0691/0699
AUTHOR: Teodorescu, V. (Physician major), Ceausu, V. (Chief psychologist), Sion, C.
Enachescu, M. (Psychologist), Budescu, C. (Physician major) 31
B

TITLE: Opinions regarding the prognostic value of the selective psychological examination of candidates for aviation schools

SOURCE: Revista sanitara militara, no. 4, 1964, 691-699

TOPIC TAGS: aviation school, pilot training, pilot selection, psychological testing, aptitude testing, flight aptitude, personality trait, manual coordination

ABSTRACT: Since 1920, the notion of "flight aptitude" in the psychological sense has become increasingly important. Considering that most of the accidents which have occurred have been due to pilot errors connected strictly with the "human factor," the development of an effective psychological method for the selection of flight personnel has become essential. The purpose of the present investigation was to compare the data of the psychological tests (based on a comparison between the personalities of the candidates) with the scholastic and professional development of the individuals. The main parameters under investigation were: the prognostic value of the psychological tests, the diagnostic value of the tests, the

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"specific weight" exerted by each test on the entire examination, and also the reliability of the interpretation of the results. A group comprising all the candidates admitted to aviation schools (in Rumania) between 1959 and 1962 was used for the investigation. The examination was made-up of a group of written tests (Kraepelin's calculation; the barrier test of Bourdon-Wiersma; the search for disordered numbers; the "labyrinth" test; a questionnaire on personality traits; collective tests for verbal-logical association; a questionnaire on interest in the field of aviation), and individual practical tests (coordination of movements; the complex reaction; tachyscopy test; verbal association experiment). The collective written tests were used to narrow down the field of candidates. It was considered that candidates with possibilities of success should possess good development in the following groups of qualities: dynamic characteristics of mental activity; characteristics of the information-reaction-autoregulation cycle; affective motivation; social and moral characteristics and attitude; activity integration and compensation; and personality traits. Of the total number of candidates, 7-10% were rejected as a consequence of the psychological selection. Furthermore, since all the candidates subjected to the selective psychological examination had already begun their flight training (some of them were licensed jet-pilots), the authors

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felt that it would be desirable to verify the prognostic value of this type of testing. The method consisted of comparing the data of the psychological examination with the scholastic and professional development, using a statistical analysis of the numerical values obtained in the laboratory and field research. The importance of personal conversations between the instructor and the candidate during the field tests is stressed. From the data obtained, the candidates were graded as good, average and poor. The comparative results of theoretical and practical tests are shown in Table 1 of the Enclosure. On the basis of these findings, the following conclusions were obtained: 1) A comparison between the results of the psychological examination and those obtained by the candidates in theoretical courses and flight activities fully demonstrates the effectiveness of the examination procedure. 2) The psychophysiological examination is partially a method of diagnosing the degree of development of flight aptitudes, and partially a way of predicting the development of adaptation to flight conditions. 3) The number and variety of the practical tests is particularly important. 4) The quantitative indexes have a greater prognostic value in regard to the theoretical preparation. In regard to flight capacity, the most important indexes are the practical tests, and the complex psychological analysis of the performance of the subjects in all the tests. 5) The investigation of the students must not be limited to the initial examination, but should be dynamic, using all available data on their behavior and scholastic activities. Orig. art. has: 4 tables.

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